

Social Institutions and Child Health and Development

Interactions between children and families and **formal child care, school, and religious institutions** in their communities influence children's cognitive, social, and emotional development.

General Information	
Broad Focus Area	Social Environment
Background and Justification	<ul style="list-style-type: none"> · The formal institutions available to children and families in a community are key contextual variables that influence children's cognitive, social, and emotional development. These institutions include schools, child care facilities, youth development programs, organized recreational activities, law enforcement and justice programs, social services, religious institutions, and the media. (Health services also are included, but are addressed in greater detail by the Health Services Working Group). · These institutions all have been found in more limited studies to have a significant influence on children's health and mental health outcomes. Although there have long been strands of inquiry addressing institutions as important contexts for development (particularly for emotional adjustment and mental health outcomes), there rarely have been opportunities to examine the interactions among institutions and other important developmental contexts, such as family, neighborhood, etc., or their interactions among one another. · The emphasis on specific institutions recognizes that although a number of institutions are influential for child health and development – child care, schools, and religious institutions are particularly influential among very broad sectors of the population. In addition, institutional influences are likely to be mediated or moderated through other aspects of the environment, such as family and neighborhood influences. Many of the institutions encountered by children and families are publicly-supported organizations that serve large numbers of individuals, and represent environments that are potentially modifiable in ways that enhance children's development, or settings where specific interventions or treatments can be delivered. Almost all children attend school for the majority of their childhood years; large numbers also are involved in preschool and child care programs. These represent large investments, and the extent to which these environments are supportive of the key developmental tasks of childhood could have a very large impact on health and mental health outcomes of interest. The identification of the factors within these programs that shape developmental pathways is critical to efforts to reform or reshape the organizations that serve children. · To date, there have been no <i>population-based</i>, prospective longitudinal studies that examine the influences of child care on children's health and development. The most comprehensive study to date, the NICHD Study of Early Child Care, has followed about 1,300 children from birth through early elementary school at 10 sites across the country; the participants, however, are not representative of the U.S. population and low income children are underrepresented. · Similarly, the impacts of school characteristics and family religious practice on children's health and development remain largely unstudied. Although the Department of Education has undertaken a number of studies on schools, none have been longitudinal studies that can examine the complex interactions between children and schools over time.

	<ul style="list-style-type: none"> · Conducting this research in the context of the NCS would allow study of interactions between diverse family, school, and child care environments, and the examination of a broad range of outcomes, including children's cognitive, social, and emotional development.
Prevalence/ Incidence	<p>Examples of the prevalence and nature of child care, school, and religious institution influences include:</p> <ul style="list-style-type: none"> · <i>Child care.</i> Estimates from the 1999 National Household Education Survey showed that 41% of infants under age 1 were in regular child care arrangements; by age 4, more than four-fifths of all children were in child care.¹ · <i>Schools.</i> Almost all American children attend school outside the home, and most of those children attend public school. School facilities may be a significant source of environmental hazards. The GAO estimated in 1995 that about 60% of the nation's schools were in need of major repairs.² Apart from the physical risks, deteriorating school buildings detract from the learning environment and require the diversion of resources away from the school's instructional mission. In 2001, the American Public Health Association (APHA) raised concerns about children's exposure to lead, radon, mold and moisture, asbestos, inadequate plumbing, poor lighting, and indoor air pollution in school buildings.³ · <i>Religion.</i> A recent poll estimated that in the past week, 82% of all U.S. adults had prayed, 43% had attended services, and 19% had attended an adult religious education class.⁴ Among adolescents 13-18 years of age, 87% affiliate with an organized religion, 80% pray, and 40% pray daily. More than half of all American teens attend religious services at least monthly, with 38% attending every week.⁵ Over half are involved in religious youth groups at some point during their high school years. Both religious affiliation and practice vary significantly by region, gender, race, and urban/rural residence.^{4,6}
Economic Impact	Impact depends on the specific social, emotional, or cognitive development outcome being examined.

Exposure Measures		Outcome Measures	
<i>Family Measures</i>	<ul style="list-style-type: none"> · Religious affiliation, religiosity, and religious practice 	<i>Primary/Maternal</i>	
Methods	Interview	Methods	
Life Stage	Prenatal	Life Stage	
<i>Primary/Child</i>	<p>Child care environment:</p> <ul style="list-style-type: none"> · Structural aspects (facility quality, group size, staff ratios, etc.) · Functional aspects (caregiver interactions, continuity, curriculum, policies, etc.) · Timing of placement in childcare, number hours spent per day, etc. <p>School environment:</p> <ul style="list-style-type: none"> · Programs and policies (e.g., learning disabilities, health promotion, breakfast and lunch programs, violence/drug use/high-risk sexual behavior prevention, 	<i>Primary/Child</i>	<ul style="list-style-type: none"> · Social and emotional function · Risk-taking behavior · Cognitive function (also see measurement issues associated with neurodevelopmental and behavioral outcomes in hypotheses focused on neurodevelopment and behavior)

	<p>etc.)</p> <ul style="list-style-type: none"> · Structural (e.g., class and school size, instructional weaknesses, safety) · Health and mental health counseling services · Facilities (condition, indoor air quality, cleanliness, safety hazards, exposure to toxics) <p>Religious environment:</p> <ul style="list-style-type: none"> · Family values and attitudes (see family measures above) · Practice (attendance at services, religious education, other groups, prayer and religious ritual in the home) · Social support (e.g., emotional and informational support; percent of social ties that attend the same religious organization) · Influence on parenting practices (discipline, monitoring, warmth) · Characteristics of religious organization (teachings, policies, social cohesion, activities for children, youth and adults, size) 		
Methods	<p>Interviews (child, parents, child caregivers, teachers, and religious organizations);</p> <p>Administrative/school records;</p> <p>Direct observation</p>		<p>Methods</p> <ul style="list-style-type: none"> · Questionnaires/interviews with child, parents, caretakers (measuring child cognitive, social, and behavioral characteristics) · Examination by a medical professional (neuropsychological, cognitive, and behavioral tests; social function) · School records review (grades/performance/behavior)
Life Stage	<p>Timing varies depending on the specific exposure:</p> <ul style="list-style-type: none"> · Child care: annually during the preschool years; once during year that the child enters school; once during the 6-8-year period; once during the 8-11-year period. · School: upon entry into school; during middle childhood (ages 8-10); as children enter adolescence; as children prepare to leave high school. · Religious institutions: pre-school 		<p>Life Stage</p> <p>Timing varies depending on the specific outcome:</p> <p>Pre-school years (ages 3-5), middle childhood (ages 8-10), and middle adolescence (ages 14-15)</p>

	years (age 3-5); middle childhood (ages 8-10); middle adolescence (14-15).		
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Important Confounders/Covariates	
Family factors (parental education level, number of siblings, socioeconomic status, shared family genetic characteristics, etc.)	See hypotheses on risk taking behavior and physical aggression
Neurotoxic environmental exposures (lead, pesticides)	Environmental exposures to neurotoxins have been shown to affect neuro-psychological function including alterations in cognition, sensory, motor, social, emotional development and executive function (See hypothesis on “Non-persistent pesticides and poor neurobehavioral and cognitive skills”).
Injury (repeated head trauma)	See specific hypothesis related to “Repeated head trauma and neurocognitive development”
Neighborhood attributes (e.g., noise, community violence, etc.)	See Hypothesis on “Impact of neighborhood and communities on child health”
Media Factors	See Hypothesis on “Impact of media exposure on child health and development”
Prenatal Infection	See Hypotheses on “Prenatal infection and neurodevelopmental disabilities” and “Prenatal and perinatal infection and schizophrenia”

Population of Interest		Estimated Effect that is Detectable
All Children		

Other Design Issues	
Ethical/Burden Considerations	Assessment interview time is the major burden for parents and children. Child care providers, teachers, or religious organizations, particularly in informal and unregulated settings, may experience data collection as intrusive and have concerns about confidentiality. Care should be taken to treat religious differences with sensitivity.
Cost/Complexity of Data Collection	Some training will be required for administration of assessments, but it will not be extensive in nature. Efforts will be made to select instruments that are reliable and valid, require limited training, and are low in cost.
Need for Community Involvement	<ul style="list-style-type: none"> · Measuring the social environment may involve the collection and integration of information on the local areas in which participants live. · Gathering administrative data requires the agreement of the respondents as well as the cooperation of agencies that hold data.

References:

¹ Shonkoff, J. & Phillips, D. (2001). *Neurons to Neighborhoods*. Washington, DC: National Academy Press.

² General Accounting Office, 1995. *School Facilities: Condition of America's Schools*. Washington, DC: U. S. Government Printing Office.

³ American Public Health Association (2001). Policy Statement: Creating healthier school facilities. American Journal of Public Health, 91, 494-495.

⁴ Barna Research 2001 Protestants, Catholics and Mormons Reflect Diverse Levels of Religious Activity. Barna Research Online, July 9, <http://www.barna.org/cgi-bin/PagePressRelease.asp?PressReleaseID=93&Reference=B>

⁵ National Study of Youth and Religion, various documents, 2002. Available at <http://www.youthandreligion.org/news/5-2-2002.html>

⁶ Wilcox B , Rostosky SS, Randall B, Wright MLC. Reason for Hope: A Review of Research on Adolescent Religiosity and Sexual Behavior. In National Campaign to Prevent Teen Pregnancy, Keeping the Faith: The Role of Religion and Faith Communities in Preventing Teen Pregnancy. Washington DC, 2001.